

Application No. 10/027,906

REMARKS

Claims 2-25, 126-133, 136, 137, 142-145, and 148-184 are pending. Applicants acknowledge with appreciation that claims 2-25, 126-133, 136, 137, 142-145 and 148-184 are allowed. Claims 142 and 182-184 currently stand as rejected. The Examiner indicated that Claims 143 and 144 have been objected to as depending upon a rejected base claim, but would be allowable if rewritten in independent form. Applicants respectfully request reconsideration of the rejections in view of the following comments.

Rejections Under 35 U.S.C. § 102(e)

The Examiner rejected claims 142, 183 and 184 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,215,585 to Yoshimura et al. (the '585 Patent). More specifically, the Examiner asserted that the '585 Patent discloses "a planar optical circuit comprising a monolithic optical structure (figure 1) having a first optical device (15) and a second optical device (17), the first optical device and the second optical device being optically connected by a free space optical element (11) embedded within the monolithic optical structure." Applicants submit that the element 11 of the '585 Patent is not a free space optical element as that term is used throughout Applicants' specification and as would be interpreted by a person of ordinary skill in the art. Applicants respectfully request reconsideration of the rejection based upon the following comments.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." See MPEP § 2131. In the office action, the Examiner asserted that element 11 in Fig. 1 of the '585 Patent is a free space optical element. However, the '585 Patent discloses that element 11 is waveguide for transmitting light branched by the optical branching filter. See '585 Patent specification at column 16, lines 61-62. As used throughout the '585 Patent specification, the term waveguide

Application No. 10/027,906

refers to an integral material, such as doped glass, that is incorporated into the optical circuit to direct the propagation of light.

In contrast, a free space optical element, as used through Applicants' specification, refers to structures, such as microlenses that can be inserted into an optical circuit. See, for example, specification at page 77, lines 1-7. Thus, free space optical elements inserted into the optical circuit creates some character of the structure that reflects the origin of the element as having had an existence separate, i.e., free space, from the monolithic structure before insertion. In other words, the free space optical elements of the present application are separate elements that are inserted into an optical circuit, not an integral waveguide layer formed into an optical circuit system. With all due respect, the broadest reasonable interpretation of a free space optical element does not include the integral waveguide structures of the '585 Patent. Therefore, since Applicants' invention, as claimed in independent claim 142, relates to a planar optical element comprising a free space optical element embedded within a monolithic optical structure, and the '585 Patent does not disclose a free space optical element as that term is used throughout Applicants' specification, the '585 Patent does not anticipate Applicants' claimed invention.

Since the '585 Patent does not anticipate Applicants' claimed invention, Applicants respectfully request the withdrawal of the rejection under 35 U.S.C. § 102(e) as being anticipated by the '585 Patent.

#### Rejections Under 35 U.S.C. § 103(a)

The Examiner rejected claim 182 under 35 U.S.C. § 103(a) as being unpatentable over the '585 Patent. More specifically, the Examiner alleged that "the materials recited by claim 182 were known at the time of the present application to have been part of a photo-electric IC of the type disclosed by" the '585 Patent. Claim 182 depends from claim 142 and therefore incorporates all of the features of claim 142. As discussed above, the '585 Patent does not

Application No. 10/027,906

disclose an optical circuit having a free space optical element embedded within a monolithic optical structure. Additionally, the '585 Patent does not teach, suggest or motivate an optical circuit having a free space optical element embedded within a monolithic optical structure, as disclosed and claimed by Applicants. Thus, since the '585 Patent does not render claim 142 prima facie obvious, the '585 Patent does not render claim 182, which depends from claim 142, prima facie obvious.

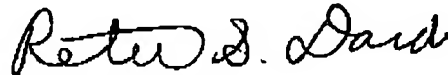
Applicants do not comment further on the Examiner's assertions with respect to other specific features of claim 182, although they do not acquiesce in the assertions of the office action, since these issues are presently moot in view of the above analysis. Since the '585 Patent does not render Applicants' claimed invention prima facie obvious, Applicants respectfully request the withdrawal of the rejection of claim 182 under 35 U.S.C. § 103(a) as being unpatentable over the '585 Patent.

#### CONCLUSION

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



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